

QTP 4Y0X1-2
June 2003

DENTAL ASSISTANT SPECIALTY

Volume 2. Clinical Skills - Radiology



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Qualification Training

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Pages: 41

Volume 2, *Clinical Skills - Radiology*, Qualification Training Package (QTP) contains modules on the production, duplication, processing, and mounting of dental radiographs and the application of radiation safety. The QTPs are designed to enhance 3-, 5- and 7-skill level OJT of dental assistant personnel. Trainees, trainers, supervisors, and task certifiers will all use the eight volumes. Before initiating any training you should review your responsibilities--as a supervisor/trainer--for conducting on-the-job training (OJT) per AFI 36-2201, *Air Force Training Program*.

QTPs are designed to help you conduct and evaluate your field training. Once you begin upgrade training you're required to use the QTPs. QTPs provide continuity to the trainee's upgrade training and are divided into the following volumes: 1) *Basic Skills*; 2) *Clinical Skills - Radiology*; 3) *Clinical Skills - Chairside Assisting*; 4) *Clinical Skills - Preventive Dentistry*; 5) *Patient Administration - Procedures and Programs*; 6) *Logistics Management*; 7) *Clinic Management*, and 8) *Supervision and Training*. The QTP modules were written to assist you in preparing for and conducting training. You *must* use the QTP modules for training when either: 1) the STS task is a core task (minimum qualification for the specialty); or 2) you have identified the STS task as a requirement of the trainee's job. Each module segments the major tasks into teachable elements. Your goal is to provide enough training and guidance so trainees can do all task related steps, without assistance, while meeting local requirements for speed and accuracy. QTPs also aid OJT task certifiers in evaluating the trainee's demonstrated performance. If you have local training requirements not covered by a QTP module you *should* develop "steps in performance" and "performance checklists" that support and standardize those tasks.

Accompanying each volume of QTPs is a *qualification training progress record*. This QTP record serves as a document to record the date the trainee completes each module. Individuals in qualification/upgrade training must have this QTP progress record filed in their OJT folder. Use and annotation of this progress record are similar to current OJT documentation. When *you* are satisfied the trainee meets standards, as prescribed in the QTP performance checklist, *you* must document and initial each task completion date in column 2B of the Specialty Training Standard (STS) and the "date completed" column in the QTP progress record. If a person is being recertified on a task that is supported by a QTP you must use that module to complete the recertification process.

Typically, you will manage each module by first, training the tasks and then, evaluating performance. Your local steps in performance may vary from the method listed in the QTP module. If this is the case, you are authorized to make changes to the first half of each module, (i.e., steps in task performance); however, the "performance checklist" is considered a *standard* and cannot be altered. You may train each QTP volume/module in any sequence; however, when conducting training

use an organized and methodical approach. This will reduce your training time and enhance your efforts.

When beginning any training process you should first, review the procedures in each module with the trainee. Second, direct the trainee to review the training references listed to prepare for task performance. Third, go through the steps in task performance with the trainee, allowing enough time to adequately train each step (some modules may take longer to teach). Fourth, evaluate the trainees work at each critical step--using the performance checklist at this point will be helpful. Fifth, evaluate the trainee's performance and provide feedback on any areas for improvement. Finally, when the trainee has successfully completed the task you must document and initial both the STS and the QTP progress record. If the trainee does not accomplish the module, conduct follow-up instruction until the trainee successfully completes the task.

The QTP project goal of the 381 TRS/XWAA, Sheppard AFB TX, is to publish a useable document for trainers and trainees. You are encouraged to write-in changes or revisions to the QTPs. A corrections/improvements letter is located on the last page of each QTP volume.

The inclusion of names of any specific commercial product, commodity, or service in this publication is for informational purposes only and does not imply endorsement by the Air Force.

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MODULE 2-1 ADJUSTING DENTAL RADIOGRAPHIC EQUIPMENT

STS TASK REFERENCES:

- 9.3.1. Adjust voltage control
- 9.3.2. Adjust timing control
- 9.3.3. Adjust milliamperage

TRAINING REFERENCES:

CDC 4Y051A
The Dental Assistant
Modern Dental Assisting
Manufacturer's Instructions
Local Guidance

EVALUATION INSTRUCTIONS:

After ensuring the trainee has received sufficient supervised practice, evaluate his/her abilities using the performance checklist

PERFORMANCE RESOURCES:

AF Form 644, Record of Dental Attendance
Dental Health Record
Dental Radiographic (X-Ray) Unit
Operating Manuals

STEPS IN TASK PERFORMANCE:

1. Review AF Form 644 to determine type of radiograph requested
2. Ensure x-ray unit master switch is on
3. Adjust kilovoltage peak (kVp) IAW equipment and film manufacturers' recommendations
4. Adjust milliamperage (mA) IAW with manufacturer's recommended settings
5. Adjust exposure time IAW manufacturer's instructions, type of radiograph, and patient size
6. Unit controls may also be adjusted to meet dentist's preferences

**MODULE 2-1 ADJUSTING DENTAL RADIOGRAPHIC EQUIPMENT****PERFORMANCE CHECKLIST****INSTRUCTIONS:**

The trainee must satisfactorily perform all parts of the task without assistance. Evaluate the trainee's performance using this checklist.

DID THE TRAINEE...?	YES	NO
1. Adjust kVp IAW equipment and film manufacturers' recommendations		
2. Adjust mA IAW manufacturer's recommendations		
3. Adjust exposure time IAW manufacturer's instructions, type of radiograph, and patient size		

FEEDBACK:

Provide trainee with appropriate feedback. (Refer to Introduction)



MODULE 2-2 EXERCISING RADIATION SAFETY

STS TASK REFERENCES:

- 9.5. Exercise radiation safety
- 9.6.1. Prepare patient, such as remove jewelry and prosthetic appliances

TRAINING REFERENCES:

CDC 4Y051A
The Dental Assistant
Modern Dental Assisting
Comprehensive Dental Hygiene Care
Clinical Practice of the Dental Hygienist
Local Instructions

EVALUATION INSTRUCTIONS:

After ensuring the trainee has received sufficient supervised practice, evaluate his/her abilities using the performance checklist

PERFORMANCE RESOURCES:

Dosimeter/film badge
Lead Apron with Thyroid Cervical Collar
Protective Lead Barrier
Step Wedge
X-ray Unit

STEPS IN TASK PERFORMANCE:

1. Perform step wedge test
2. Wear dosimeter/film badge in exposure area, if required
3. Inspect front and back of lead apron for rips, tears, and cracks (NEVER fold lead aprons)
4. Turn in unserviceable aprons to dental supply for appropriate disposition
5. Screen female patients on the possibility of being pregnant
6. Instruct patient to remove metallic items and removable prostheses from head and neck area
7. Place lead apron with thyroid cervical collar on patient
8. Stand behind protective barrier during exposure

**MODULE 2-2 EXERCISING RADIATION SAFETY****PERFORMANCE CHECKLIST****INSTRUCTIONS:**

The trainee must satisfactorily perform all parts of the task without assistance. Evaluate the trainee's performance using this checklist.

DID THE TRAINEE...?	YES	NO
1. Perform step wedge test		
2. Inspect apron to ensure serviceability		
3. Identify process for unserviceable aprons		
4. Screen female patients for pregnancy		
5. Instruct patient to remove metallic items before exposure		
6. Place lead apron with thyroid cervical collar on patient		
7. Stand behind protective barrier during exposure		

FEEDBACK:

Provide trainee with appropriate feedback. (Refer to Introduction)



**MODULE 2-3 PRODUCING DENTAL RADIOGRAPHS USING THE
PARALLELING TECHNIQUE**

**MODULE 2-3A EXPOSING PERIAPICAL RADIOGRAPHS USING THE
PARALLELING TECHNIQUE**

STS TASK REFERENCE:

- 9.3.1. Adjust voltage control
- 9.3.2. Adjust timing control
- 9.3.3. Adjust milliamperage
- 9.5. Exercise radiation safety
- 9.6.1. Prepare patient, such as remove jewelry and prosthetic appliances
- 9.6.2.4. FMXR series

TRAINING REFERENCES:

CDC 4Y051A
The Dental Assistant
Modern Dental Assisting
Comprehensive Dental Hygiene Care
Clinical Practice of the Dental Hygienist
Local Guidance

EVALUATION INSTRUCTIONS:

After ensuring the trainee has received sufficient supervised practice, evaluate his/her abilities using the performance checklist

PERFORMANCE RESOURCES:

AF Form 644, Record of Dental Attendance
Dental Health Record
Infection Control Barriers
Lead Apron with Thyroid Cervical Collar
Radiographic Film
X-Ray Unit
X-tension C-one P-aralleling (XCP) Instrument

**STEPS IN TASK PERFORMANCE:**

1. Review patient's record for health history and type of radiograph requested
2. Adjust x-ray control panel to required settings
3. Brief patient on procedure
4. Place lead apron with thyroid cervical collar on patient
5. Place barrier over tube head
6. Place film in biteblock with embossed dot toward occlusal/ incisal surface
7. Place biteblock behind and parallel to long axis of appropriate tooth
8. Instruct patient to close down gently on biteblock
9. Establish parallel relationship between cone opening and locator ring
10. Place x-ray cone parallel to indicator rod
11. Stand behind protective barrier
12. Expose radiograph



MODULE 2-3A EXPOSING PERIAPICAL RADIOGRAPHS USING THE PARALLELING TECHNIQUE

PERFORMANCE CHECKLIST

INSTRUCTIONS:

The trainee must satisfactorily perform all parts of the task without assistance. Evaluate the trainee's performance using this checklist.

DID THE TRAINEE...?	YES	NO
1. Review patient record for health history and type of x-ray requested		
2. Adjust x-ray control panel IAW manufacturer's recommendations		
3. Place film in XCP biteblock with embossed dot toward the occlusal surface		
4. Correctly place loaded XCP instrument into patient's mouth		
5. Instruct patient to close down gently on biteblock		
6. Align x-ray cone and XCP properly for exposure		
7. Expose radiograph		

FEEDBACK:

Provide trainee with appropriate feedback. (Refer to Introduction)



MODULE 2-3B EXPOSING HORIZONTAL BITEWING RADIOGRAPHS USING THE PARALLELING TECHNIQUE

STS TASK REFERENCE:

- 9.3.1. Adjust voltage control
- 9.3.2. Adjust timing control
- 9.3.3. Adjust milliamperage
- 9.5. Exercise radiation safety
- 9.6.1. Prepare patient, such as remove jewelry and prosthetic appliances
- 9.6.2.1. Horizontal BWXR (2 films)
- 9.6.2.2. Horizontal BWXR (4 films)

TRAINING REFERENCES:

CDC 4Y051A
The Dental Assistant
Modern Dental Assisting
Comprehensive Dental Hygiene Care
Clinical Practice of the Dental Hygienist
Local Guidance

EVALUATION INSTRUCTIONS:

After ensuring the trainee has received sufficient supervised practice, evaluate his/her abilities using the performance checklist

PERFORMANCE RESOURCES:

Bitewing Film (2) – Type 3 film
Bitewing Film (4) – Type 2 film
Adhesive Bite Tabs (4)
Infection Control Barriers
Periapical Film
Lead Apron with Thyroid Cervical Collar
X-Ray Unit



STEPS IN TASK PERFORMANCE:

1. Review patient's record for health history and type of radiograph requested
2. Adjust x-ray control panel to required settings
3. Brief patient on procedure
4. Provide patient with lead apron and thyroid cervical collar
5. Adjust tubehead to +10° positive angulation (aim downward)
6. Ensure distal 1/3 of most anterior cuspid is included in exposure (Type 3 film horizontal)
7. Center molar film on second molar (Type 2 film horizontal)
8. Place bicuspid film with forward edge covering distal 1/3 of cuspid (Type 2 film horizontal)
9. Instruct patient to close gently
10. Position patient with occlusal plane parallel to floor
11. Establish parallel relationship between cone opening and film; opening rests lightly against the patient's cheek
12. Center bitetab in cone opening
13. Stand behind protective barrier
14. Expose film
15. Repeat steps 5-15 for remaining film(s)



**MODULE 2-3B EXPOSING HORIZONTAL BITEWING RADIOGRAPHS USING
THE PARALLELING TECHNIQUE**

PERFORMANCE CHECKLIST

INSTRUCTIONS:

The trainee must satisfactorily perform all parts of the task without assistance. Evaluate the trainee's performance using this checklist.

DID THE TRAINEE...?	YES	NO
1. Place lead apron with thyroid cervical collar on patient		
2. Select appropriate films for requested x-rays		
3. Adjust unit tubehead to +10° positive angulation		
4. Place the film in the patient's mouth		
5. Properly position patient for exposure of x-ray		
6. Properly align unit tubehead		
7. Expose x-ray		

FEEDBACK:

Provide trainee with appropriate feedback. (Refer to Introduction)



MODULE 2-3C EXPOSING VERTICAL BITEWING RADIOGRAPHS USING THE PARALLELING TECHNIQUE

STS TASK REFERENCE:

- 9.3.1. Adjust voltage control
- 9.3.2. Adjust timing control
- 9.3.3. Adjust milliamperage
- 9.5. Exercise radiation safety
- 9.6.1. Prepare patient, such as remove jewelry and prosthetic appliances
- 9.6.2.3. Vertical BWXR series

TRAINING REFERENCES:

CDC 4Y051A
The Dental Assistant
Modern Dental Assisting
Comprehensive Dental Hygiene Care
Clinical Practice of the Dental Hygienist
Local Guidance

EVALUATION INSTRUCTIONS:

After ensuring the trainee has received sufficient supervised practice, evaluate his/her abilities using the performance checklist

PERFORMANCE RESOURCES:

Adhesive Bite Tabs (4)
Periapical Film (4) – Type 2 film
Lead Apron with Thyroid Cervical Collar
X-Ray Unit

**STEPS IN TASK PERFORMANCE:**

1. Gather four (4) periapical films with bitetabs
2. Adjust x-ray control panel to required settings
3. Brief patient on procedure
4. Provide patient with lead apron and thyroid cervical collar
5. Place long axis of film perpendicular to occlusal plane and the floor
6. Center film vertically on contact of first and second molar for the molar view
7. Center film vertically on the second bicuspid for the bicuspid view
8. Instruct patient to close gently
9. Position patient with occlusal plane parallel to floor
10. Establish parallel relationship between cone opening and film, opening rests lightly against the patient's cheek
11. Establish parallel relationship between cone opening and film
12. Center bite tab in cone opening
13. Stand behind protective barrier
14. Expose film
15. Repeat steps 5-15 for remaining film(s)

**MODULE 2-3C EXPOSING VERTICAL BITEWING RADIOGRAPHS USING THE PARALLELING TECHNIQUE****PERFORMANCE CHECKLIST****INSTRUCTIONS:**

The trainee must satisfactorily perform all parts of the task without assistance. Evaluate the trainee's performance using this checklist.

DID THE TRAINEE...?	YES	NO
1. Place lead apron with thyroid cervical collar on patient		
2. Select appropriate films for requested x-rays		
3. Correctly place the film in patient's mouth		
4. Properly position patient for exposure of radiograph		
5. Place film in the patient's mouth		
6. Align x-ray tubehead to expose the film		
7. Expose x-ray		

FEEDBACK:

Provide trainee with appropriate feedback. (Refer to Introduction)



**MODULE 2-4 EXPOSING ENDODONTIC RADIOGRAPHS USING THE
BISECTING ANGLE TECHNIQUE**

STS TASK REFERENCE:

- 9.3.1. Adjust voltage control
- 9.3.2. Adjust timing control
- 9.3.3. Adjust milliamperage
- 9.5. Exercise radiation safety
- 9.6.1. Prepare patient, such as remove jewelry and prosthetic appliances
- 9.6.3. Use bisecting angle technique

TRAINING REFERENCES:

CDC 4Y051A
The Dental Assistant
Modern Dental Assisting
Comprehensive Dental Hygiene Care
Clinical Practice of the Dental Hygienist
Local Guidelines

EVALUATION INSTRUCTIONS:

After ensuring the trainee has received sufficient supervised practice, evaluate his/her abilities using the performance checklist

PERFORMANCE RESOURCES:

Lead Apron with Thyroid Cervical Collar
Radiographic Film – Type 2 film
Rubber Dam Frame
Film Holding Device
X-Ray Unit



STEPS IN TASK PERFORMANCE:

1. Adjust x-ray control panel to required settings
2. Seat patient in upright position
3. Brief patient on procedure
4. Provide patient with lead apron and thyroid cervical collar
5. Remove rubber dam frame from patient's mouth, if it is not radiopaque
6. Load film into holding device (hemostat/snap-a-ray); place behind target tooth. Use caution to avoid protruding endodontic files
7. Instruct patient to hold the instrument with their hand to keep film steady/rigid **OR** place film using the endo XCP instrument
8. Adjust conehead to ensure tooth apex is included in radiograph using bisecting angle technique **OR** adjust conehead to the aiming ring of the endo XCP instrument
9. Instruct patient to remain still
10. Stand behind protective barrier
11. Expose radiograph



**MODULE 2-4 EXPOSING ENDODONTIC RADIOGRAPHS USING THE
BISECTING ANGLE TECHNIQUE**

PERFORMANCE CHECKLIST

INSTRUCTIONS:

The trainee must satisfactorily perform all parts of the task without assistance. Evaluate the trainee's performance using this checklist.

DID THE TRAINEE...?	YES	NO
1. Remove metal rubber dam frame from patient's mouth		
2. Use correct techniques for placing the film in the patient's mouth		
3. Instruct patient to remain still		
4. Adjust tubehead to ensure tooth and film are properly aligned		
5. Expose radiograph		

FEEDBACK:

Provide trainee with appropriate feedback. (Refer to Introduction)



MODULE 2-5 EXPOSING OCCLUSAL RADIOGRAPHS USING THE BISECTING ANGLE TECHNIQUE

STS TASK REFERENCE:

- 9.3.1. Adjust voltage control
- 9.3.2. Adjust timing control
- 9.3.3. Adjust milliamperage
- 9.5. Exercise radiation safety
- 9.6.1. Prepare patient, such as remove jewelry and prosthetic appliances
- 9.6.3. Use bisecting angle technique

TRAINING REFERENCES:

CDC 4Y051A
The Dental Assistant
Modern Dental Assisting
Comprehensive Dental Hygiene Care
Clinical Practice of the Dental Hygienist
Local Guidelines

EVALUATION INSTRUCTIONS:

After ensuring the trainee has received sufficient supervised practice, evaluate his/her abilities using the performance checklist

PERFORMANCE RESOURCES:

Occlusal Film
Lead Apron with Thyroid Cervical Collar
X-Ray Unit

**STEPS IN TASK PERFORMANCE:**

1. Adjust x-ray control panel to required settings
2. Brief patient on procedure
3. Provide patient with lead apron and thyroid cervical collar
4. Mandibular occlusal exposures
 - a. Position patient with face parallel to ceiling
 - b. Insert occlusal film with embossed dot away from mandibular arch
 - c. Instruct patient to close down gently on the film
 - d. Position x-ray tubehead at a 90° angle to film packet for mandibular exposures
5. Maxillary occlusal exposures
 - a. Position patient sitting upright with the ala-tragus line parallel to the floor
 - b. Insert occlusal film with embossed dot away from maxillary arch
 - c. Instruct patient to close down gently on the film
 - d. Position x-ray tubehead at a 65-75° angle to film packet, centered over bridge of nose
6. Instruct patient to remain still
7. Stand behind protective barrier
8. Expose radiograph



MODULE 2-5 EXPOSING OCCLUSAL RADIOGRAPHS USING THE BISECTING ANGLE TECHNIQUE

PERFORMANCE CHECKLIST

INSTRUCTIONS:

The trainee must satisfactorily perform all parts of the task without assistance. Evaluate the trainee's performance using this checklist.

DID THE TRAINEE...?	YES	NO
1. Position patient properly for maxillary and mandibular occlusal exposures		
2. Insert occlusal film with embossed dot opposite of arch being radiographed		
3. Establish correct tubehead angle for maxillary and mandibular occlusal exposures		

FEEDBACK:

Provide trainee with appropriate feedback. (Refer to Introduction)

**MODULE 2-6 EXPOSING PANORAMIC RADIOGRAPHS****STS TASK REFERENCE:**

- 9.5. Exercise radiation safety
- 9.6.1. Prepare patient, such as remove jewelry and prosthetic appliances
- 9.6.4. Expose panoramic radiographs

TRAINING REFERENCES:

CDC 4Y051A
The Dental Assistant
Modern Dental Assisting
Comprehensive Dental Hygiene Care
Clinical Practice of the Dental Hygienist
Local Guidelines

EVALUATION INSTRUCTIONS:

After ensuring the trainee has received sufficient supervised practice, evaluate his/her abilities using the performance checklist

PERFORMANCE RESOURCES:

Panoramic Film
Panoramic Film Envelope
Panoramic X-Ray Unit
Lead Apron with Thyroid Cervical Collar



STEPS IN TASK PERFORMANCE:

1. Load film in darkroom, with only safelight on
2. Remove intensifying screen from film envelope
3. Place film between intensifying screens, close envelope and insert into cassette
4. Load film cassette into panoramic x-ray unit, align with manufacturer's guidelines
5. Instruct patient to remove metallic items and removable prostheses from head and neck area
6. Brief patient on procedure
7. Place infection control barrier over biteblock
8. Provide patient with lead apron over thyroid and gonadal areas, ensure thyroid collar does not interfere with the exposure
9. Panoramic unit with patient standing
 - a. Instruct patient to stand facing the panoramic unit, with their feet on footprints
 - b. Instruct patient to grasp panoramic unit handles
 - c. Instruct patient to stand "tall" with their back straight
10. Panoramic unit with patient seated
 - a. Instruct patient to sit in the panoramic unit
 - b. Instruct patient to sit "tall" with their back straight
11. Adjust lift mechanism to allow patient's chin to rest on chin rest
12. Hyperextend neck
13. Instruct patient to close on specific area of unit biteblock
14. Instruct patient to tilt head forward/backward to align parallel to occlusal plane
15. Ensure patient's back is still straight
16. Instruct patient to place tongue flat against hard palate, close lips, swallow, and remain still
17. Adjust x-ray unit settings IAW manufacturer's recommended instructions for patient size
18. Stand behind protective barrier
19. Expose radiograph, fully depress unit button until the machine comes to a complete stop



MODULE 2-6 EXPOSING PANORAMIC RADIOGRAPHS

PERFORMANCE CHECKLIST

INSTRUCTIONS:

The trainee must satisfactorily perform all parts of the task without assistance. Evaluate the trainee's performance using this checklist.

DID THE TRAINEE...?	YES	NO
1. Load film cassette into panoramic x-ray unit, align with manufacturer's guidelines		
2. Brief patient on procedure; instruct patient to remove metallic items and removable prosthesis from head and neck area		
3. Place infection control barrier over bite block		
4. Ensure patient's body was properly positioned		
5. Adjust x-ray unit settings IAW manufacturer's recommended instructions		
6. Properly expose film		

FEEDBACK:

Provide trainee with appropriate feedback. (Refer to Introduction)



MODULE 2-7 PROCESSING, MOUNTING AND LABELING DENTAL RADIOGRAPHS

STS TASK REFERENCES:

- 9.7.1. Use automatic developer
- 9.10. Locate and identify anatomical landmarks
- 9.11.1. Horizontal BWXR series (2 films)
- 9.11.2. Horizontal BWXR series (4 films)
- 9.11.3. Vertical BWXR series
- 9.11.4. FMXR series

TRAINING REFERENCES:

CDC 4Y051A
The Dental Assistant
Modern Dental Assisting
Manufacturer's Instructions
Local Guidelines
Year 2000 USAF Infection Control Guidelines

EVALUATION INSTRUCTIONS:

After ensuring the trainee has received sufficient supervised practice, evaluate his/her abilities using the performance checklist

PERFORMANCE RESOURCES:

Adhesive Labels
Automatic Developing Processor
Darkroom
Dental Health Record
Dental Radiographs
Dental X-Ray Mounts (FMXR, Vertical
BWXR, Horizontal BWXR, and Periapical)
Radiographic Film
Rubber Gloves

**STEPS IN TASK PERFORMANCE:**

1. Expose films, and while still gloved, drop contaminated films into paper cup or plastic bag
2. Remove gloves, wash and dry hands, then dismiss patient
3. Turn on darkroom safelight and turn off darkroom/processing area lights
4. Place a clean paper towel on processor and don new gloves
5. Separate the outer covering and lead foil without contaminating the film
6. Drop film(s) onto clean paper towel
7. Discard/salvage covering and lead foil IAW local policy
8. Remove gloves, wash and dry hands
9. Insert film into automatic processor, be careful not to overlap films by placing too close
10. Remove developed film from tray following completion of processing cycle
11. Place dental radiograph(s) in open (opposing) side of mount with embossed dot facing upward, toward technician
12. Grasp dental x-ray mount with closed side toward technician
13. Slide dental radiograph into appropriate mount until fully seated
14. Place adhesive label on panoramic, full mouth series, and cephalometric mounts; ensure label does not interfere with diagnostic quality of radiograph
15. Annotate name, patient's family member prefix code, SSAN, and radiograph date on label or mount
16. File radiograph in patient's dental health record



MODULE 2-7 PROCESSING, MOUNTING AND LABELING DENTAL RADIOGRAPHS

PERFORMANCE CHECKLIST

INSTRUCTIONS:

The trainee must satisfactorily perform all parts of the task without assistance. Evaluate the trainee's performance using this checklist.

DID THE TRAINEE...?	YES	NO
1. Remove and discard outer covering and lead foil covering IAW local infection control and precious metal recovery policies		
2. Place in processor without contamination or film overlapping		
3. Properly mount dental radiograph(s)		
4. Place adhesive label on panoramic, FMXR series, and cephalometric mounts		
5. Annotate name, patient's family member prefix code, SSAN, and radiograph date on label or mount		
6. File radiograph in patient's dental health record		

FEEDBACK:

Provide trainee with appropriate feedback. (Refer to Introduction)

**MODULE 2-8 USING THE PORTABLE MANUAL DEVELOPER****STS TASK REFERENCES:**

9.7.2. Use portable manual developer

TRAINING REFERENCES:

CDC 4Y051A

The Dental Assistant

Modern Dental Assisting

Manufacturer's Instructions

Local Guidelines

Year 2000 USAF Infection Control Guidelines

EVALUATION INSTRUCTIONS:

After ensuring the trainee has received sufficient supervised practice, evaluate his/her abilities using the performance checklist

PERFORMANCE RESOURCES:

Portable Manual Developer

X-Ray Developer Solution

X-Ray Fixer Solution

Water

Exposed Dental Film

Paper cups or plastic bags

Film Clip

Rubber Gloves

**STEPS IN TASK PERFORMANCE:**

1. Prepare portable unit with four plastic containers from left to right filled with water, developer, fixer, and water
2. Expose film and while still gloved, drop contaminated film into paper cup or plastic bag
3. Remove gloves, wash and dry hands then dismiss patient
4. Place cup/bag with exposed film into unit
5. Place a clean cup into unit for film debris, replace unit lid
6. Don new gloves and rinse powder off
7. Insert gloved hands through the light-tight baffles of the unit
8. Separate the outer covering and lead foil without contaminating the film
9. Place film clip at corner of film (embossed dot) to prevent damaging the film
10. Agitate film in developer solution to remove air bubbles for required time
11. Rinse film while agitating it in first water cup for required time
12. Agitate film in fixer solution for required time
13. Rinse film while agitating in second cup of water for required time
14. Allow film to air dry by hanging clip with film attached onto wire inside the portable unit
15. Separate lead foil for disposal IAW with local policy
16. Invert gloves before removing hands to prevent cross-contamination
17. Remove hands from unit, wash and dry
18. Don new exam gloves prior to removing debris cups from unit
19. Replace unit lid to protect chemicals from light exposure
20. Slide dental radiograph into appropriate mount until fully seated
21. Annotate name, patient's family member prefix code, SSAN, and radiograph date on label or mount
22. File radiograph in patient's dental health record



MODULE 2-8 USING THE PORTABLE MANUAL DEVELOPER

PERFORMANCE CHECKLIST

INSTRUCTIONS:

The trainee must satisfactorily perform all parts of the task without assistance. Evaluate the trainee's performance using this checklist.

DID THE TRAINEE...?	YES	NO
1. Prepare portable unit with four plastic containers holding developer, water, fixer, and water		
2. Remove gloves, wash and dry hands then dismiss patient		
3. Place cup/bag with exposed film into unit		
4. Place a clean cup into unit for film debris, replace unit lid		
5. Don new gloves and rinse powder off		
6. Separate outer covering and lead foil without contaminating the film		
7. Place film clip at corner of film (embossed dot)		
8. Agitate film in developer solution for appropriate time		
9. Agitate film in water for appropriate time		
10. Agitate film in fixer solution for appropriate time		
11. Rinse film in second of water for appropriate time		
12. Invert gloves before removing hands from unit to prevent cross-contamination		
13. Don new exam gloves prior to removing debris cups from unit		
14. Replace unit lid to protect chemicals from light exposure		

FEEDBACK:

Provide trainee with appropriate feedback. (Refer to Introduction)



MODULE 2-9 DUPLICATING DENTAL RADIOGRAPHS

STS TASK REFERENCE:

- 9.9. Duplicate dental radiographs

TRAINING REFERENCES:

CDC 4Y051A
The Dental Assistant
Modern Dental Assisting
Manufacturer's Instructions
Local Guidelines

EVALUATION INSTRUCTIONS:

After ensuring the trainee has received sufficient supervised practice, evaluate his/her abilities using the performance checklist

PERFORMANCE RESOURCES:

Automatic Processor
Darkroom or Processing Area
Dental Health Record
Duplicating Film
Operating Manuals
Radiographic Duplicator

**STEPS IN TASK PERFORMANCE:**

1. Turn on power to the duplicator
2. Turn on safelight(s) and turn off darkroom/processing area lights
3. Open duplicator unit cover
4. Place original radiograph on top of duplicator window
5. Place duplicating film on top of original radiograph—jagged edges in upper right hand corner, light side of film facing down
6. Close and secure duplicator unit cover
7. Set duplicator timer to appropriate setting for desired duplication exposure and press button
8. Change contrast, if necessary
 - a. Duplicate film is too light...decrease exposure time
 - b. Duplicate film is too dark...increase exposure time
10. Release duplicator cover locking device upon completion of cycle
11. Place duplicate film in automatic processor
12. Process duplicate film IAW manufacturer's instructions
13. Remove original radiograph from duplicator unit
14. Replace original radiograph in patient's dental health record
15. Label duplicate radiograph appropriately
16. Forward duplicate radiograph to requester

**MODULE 2-9 DUPLICATING DENTAL RADIOGRAPHS****PERFORMANCE CHECKLIST****INSTRUCTIONS:**

The trainee must satisfactorily perform all parts of the task without assistance. Evaluate the trainee's performance using this checklist.

DID THE TRAINEE...?	YES	NO
1. Place original radiograph and duplicating film properly on duplicator		
2. Secure the duplicator cover before exposing film		
3. Set duplicator timer to appropriate setting for desired duplication exposure and press button		
4. Process duplicate film IAW manufacturer's instructions		
5. Replace original radiograph in patient's dental health record		
6. Replace original radiograph in patient's dental health record		

FEEDBACK:

Provide trainee with appropriate feedback. (Refer to Introduction)



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Dental Assistant Qualification Training Progress Record

Rank/Name _____

Qualification Upgrade Training to: 5-Skill Level

<i>Volume 2. Clinical Skills - Radiology</i>					
<i>Core Task</i>	<i>Module Number</i>	<i>Page Number</i>	<i>Module Title</i>	<i>Date Completed</i>	<i>Trainer's Initials</i>
⑤	1	1	Adjusting Dental Radiographic Equipment		
⑤	2	3	Exercising Radiation Safety		
⑤	3A	5	Exposing Periapical Radiographs Using A Paralleling Technique		
⑤	3B	8	Exposing Horizontal Bitewing Radiographs Using A Paralleling Technique		
⑤	3C	11	Exposing Vertical Bitewing Radiographs Using A Paralleling Technique		
⑤	4	14	Exposing Endodontic Radiographs Using The Bisecting Angle Technique		
⑤	5	17	Exposing Occlusal Radiographs Using The Bisecting Angle Technique		
⑤	6	20	Exposing Panoramic Radiographs		
⑤	7	23	Processing, Mounting And Labeling Dental Radiographs		
⑤	8	26	Using the Portable Manual Developer		
⑤	9	29	Duplicating Dental Radiographs		



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MEMORANDUM FOR 381 TRS/XWAA (CDC Manager)
917 Missile Rd
Sheppard AFB TX 76311-2246

FROM:

SUBJECT: Qualification Training Package Improvement

1. Identify volume and module.

Volume # _____

Module # and
title _____

2. Identify improvement/correction section(s)

- | | |
|---------------------------------|-----------------------------|
| _____ STS Task Reference | _____ Performance Checklist |
| _____ Training Reference | _____ Feedback |
| _____ Evaluation Instructions | _____ Format |
| _____ Performance Resources | _____ Other |
| _____ Steps in Task Performance | |

3. Recommended changes--use a continuation sheet if necessary.

4. You may choose to call in your recommendations to DSN 736-7722 or FAX DSN/Commercial 736-2781 or (940) 676-2781.

5. Thank you for your time and interest.

YOUR NAME, RANK, USAF
Title/Position